BRGF10

900 MHz 20W GSM OPTICAL REPEATER

- **20W RF OUTPUT POWER**
- **HIGH SENSITIVITY**
- **HIGH DYNAMIC RANGE**
- **COMPACT SIZE**

This repeater is intended for use in 900 MHz in or outdoor GSM optical fibre systems. It is a compact and reliable unit, and it is especially advantageous to use it in areas where off air transmission is not preferable (like tunnels, large buildings etc.). The base station side optical master unit can communicate through optical fiber with slave unit on repeater side, which provides high flexibility in system build-up. This very economical solution can be installed easily, and optional can be monitored and set by remote control software.

Electrical characteristics:

Optical GSM Repeater Technical Parameters

Parameters	Base Station Side	Repeater Side
Frequency Band Uplink	890 – 915 MHz	890 – 915 MHz
Frequency Band Downlink	935 – 960 MHz	935 – 960 MHz
RF Gain	-10 ... -40 dB adjustable in 1dB step	30...60dB adjustable in 1dB step
ETSI compatible composite output power	-	+41 dBm @ 2 carriers **
Max. ALC level	-	+45 dBm **
Uplink path noise figure	-	3 dB @ max. gain
Pass band ripple	±1,5 dB	±1,5 dB
Gain stability	< ±1,5dB (within operating temp. range)	< ±1,5dB (within operating temp. range)
Optical module maximum RF input power	+5 dBm	+5 dBm
Optical connectors	LC	LC
RF connectors	N-female	N-female
Power supply	230V AC	230 V AC
Power consumption	Approx. 20 VA *	500 VA @ P_{out}= 43dBm
Weight	Approx. 12kg *	45 kg
Size	Approx. 370 x 270 x 100 mm *	580 x 400 x 259 mm
Operating temp. Range	-20°C to +50°C	-20°C to +50°C
Local Control	RS232	RS232
Remote Control	GSM modem	through optical fiber with master unit
Degree of protection	Outdoor	Outdoor

(*) Depends on number of master optical transceivers inside.
(**) According to the customer request other downlink RF power level version also possible.
Specifications are subject to change without notice.

BHE BONN HUNGARY ELECTRONICS Ltd. Microwave & RF Development and Manufacturing
Ipari Park Str. 10. Budapest, H-1044 * P.O.Box 164. Budapest, H-1325 Home page: www.bhe-mw.eu
Phone: +36 1 233 2138 Fax.: +36 1 233 2506 E-mail: info@bhe-mw.eu

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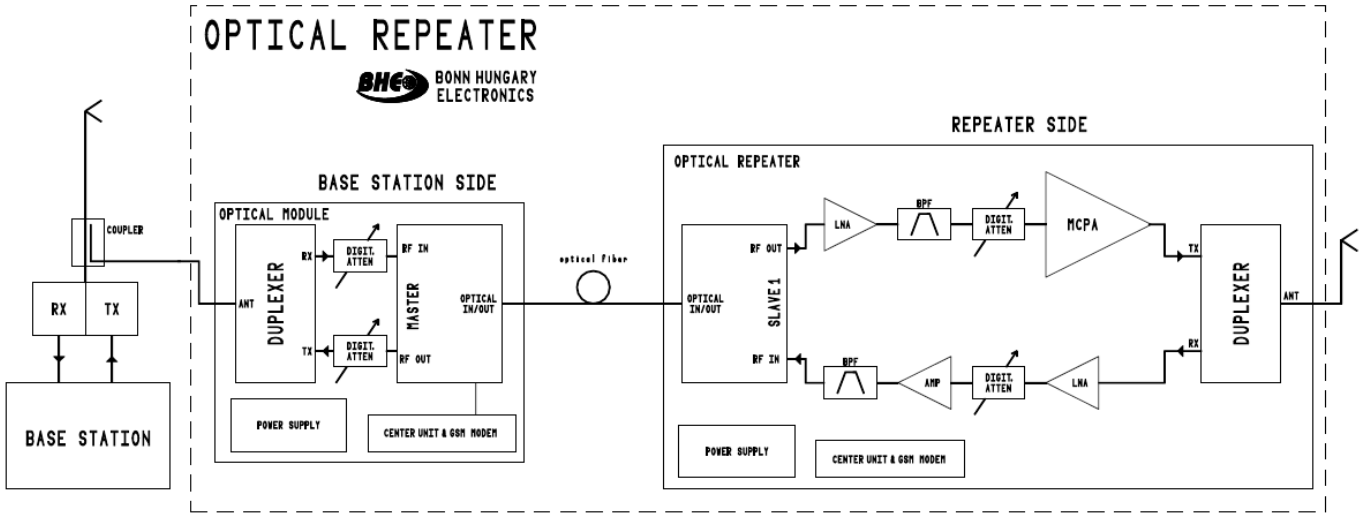
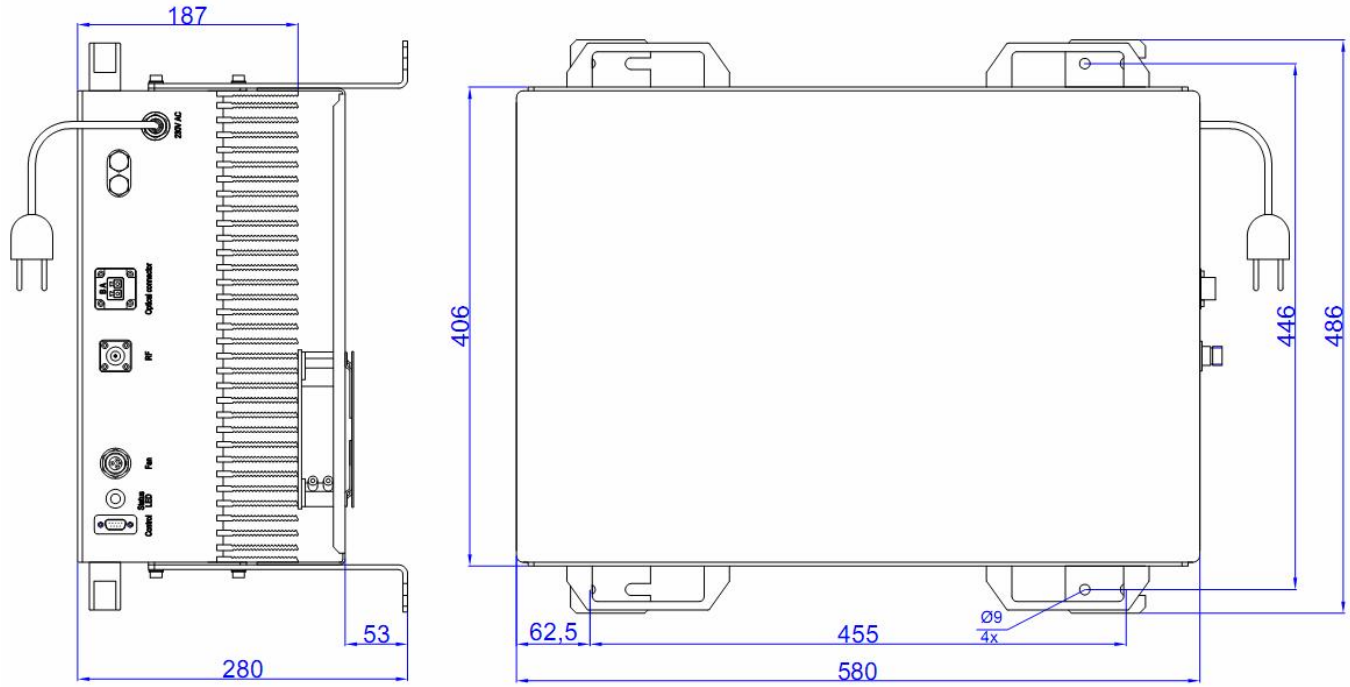
Block diagram:



Repeater side outline dimensions (mm):



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